AMENDMENTS TO THE CLAIMS

1-8 (canceled).

9. (Previously presented) A method for filtering a video signal, the video signal being received by a secondary radar, the filtering being designed to precede the detection of SSR responses, the received signal comprising samples intended to be analyzed according to the method, comprising the steps of:

a step during which at least one instantaneous power of the received signal is estimated, the power being estimated on the basis of determined signal samples, said samples at least leading or lagging by a duration greater than a duration T with respect to the sample under analysis, the duration T being the duration of an SSR response;

a step during which a threshold is determined, the threshold being at least equal to the estimated power and,

a step during which a sample under analysis which power is less than the threshold is filtered.

10. (Previously presented) The method as claimed in claim 9, in which at least two instantaneous powers are estimated, a first instantaneous power being estimated on the basis of samples that lead with respect to the sample under analysis, a second power being estimated on the basis of samples that lag with respect to the sample under analysis, the threshold being at least equal to the maximum of the estimated instantaneous powers.

11. (Previously presented) The method as claimed in claim 10, in which each instantaneous power is estimated using the peak value of the samples received for a duration τ, the duration τ being at least equal to the sum of the duration of a pulse and of the maximum duration of absence of signal in a message of a response to be filtered.

12. (Previously presented) The method as claimed in claim 11, in which each instantaneous power is estimated by averaging several successive peak values, the successive peak values being at least separated by the duration τ.

13. (Previously presented) The method as claimed in claim 9, in which the duration T is substantially equal to 24.6 µs.

14. (Previously presented) The method as claimed in claim 11, in which the responses to be filtered being mode S responses, the sum of the duration of a pulse and of the maximum duration of absence of signal is equal to 1.5 times the modulation period of the message of a mode response.

15. (Previously presented) The method as claimed in claim 11, in which the duration τ is substantially equal to 1.6 µs.

16. – 18. (Cancelled)